

1. Describe the practice proposed for recognition and list its objectives. Detail how the practice is innovative, how it promotes high student achievement.

The Schoolyard Garden and Habitat Project serves self-contained, high school students with specific learning needs. The full year program meets regularly in 55 minute, rotating blocks, both in the classroom and outside in the SGHP. The project is designed to provide academic experiences and life skills for students using environmental, ecological, and related core curriculum activities. The working group size is kept small in order to give individual attention to the multiple learning styles of each student.

The objectives of the SGHP are: 1) the students learn specific core curriculum standards in a direct manner, as opposed to solely utilizing abstract classroom learning, 2) the students learn related functional skills in the areas of reading, language arts, math, science, social studies, life skills, and technology, 3) the students learn skills necessary for the transition from school to work.

The SGHP is unique in that there are few nationally acknowledged habitats physically addressing core curriculum standards. It is registered with the National Gardening Association, National Wildlife Federation, and the New Jersey Alliance for Environmental Educators. Two grants have been awarded by NGA, one from NJAEE, and locally, one from the BASF Corporation and another from the Roxbury Parents of Exceptional Children.

Activities in the habitat are consistent with those utilized within the classroom. They reflect a direct relationship to the core curriculum as well as sub-relationships found in the students' school-to-work efforts. Collaboration has been formed in school with mainstream teachers and in the business community with local merchants who support the students' ongoing efforts. Interested parents and other community members have donated time, materials and tools, and have offered assistance to help maintain the SGHP during holidays and summer break.

Cross-curriculum standards are addressed in individual study areas created within the SGHP and supported in the classroom. Activities range from short and long-term in-class projects to hands-on applications within the habitat. Student involvement is geared toward creating a successful transition from school to their independent adult lives.

Tangential to the Core Curriculum Content Standards presented, students gain experience in business skills and gain career information. Examples are: general employment skills such as letter and resume writing, creating business stationery and brochures, maintaining portfolios, writing applications, interviewing and public speaking, business etiquette, and computer and telephone skills. Students also acquire information about related careers such as landscaping, agriculture, environmental, administrative, stone masonry, carpentry, and writing.

The SGHP promotes high student achievement as demonstrated by the students' ability to perform independently, professionally, and knowledgeably within the setting. When the student is able to transfer learned skills from the classroom into the garden/habitat, desired success is achieved. Through hands-on experience in the habitat, the students gain a greater sense of academic understanding, community pride, and a strong work ethic.

2. List the *Core Curriculum Content Standards, including the Cross-Content Workplace Readiness Standards*,* addressed by the practice and describe how the practice addresses the standards. Provide an example to substantiate your response.

The SGHP curriculum uses each student's Individual Educational Plan (IEP) as a guide for work in the habitat and classroom. Additional standards for the garden/habitat work are presented at the beginning of each in-field activity paralleling in-class work.

The SGHP addresses the Core Curriculum Standards in four of the content areas (language arts, mathematics, science, and social studies) and all five Cross-Content Workplace Readiness Standards. The SGHP provides varied opportunities for students with specific learning needs to demonstrate competence in these standards by means of purposeful experiences both in and out of a traditional classroom setting. The explicit skills gained by the students allow them to carry-on and embellish their every day life activities more proficiently with the focus centered on transition from school to work.

The Language Arts content domain is addressed by students networking with administrators, business people, and community members to learn varied speaking techniques for real audiences (3.1); actively listening to in-field professionals, mentors, and teachers to seek information from varied sources (3.2); writing business and personal letters, memos, essays, and journals to organize language, content, and form (3.3); reading texts, reference books, newspapers, catalogs, and application forms for comprehension skills and critical analysis (3.4); viewing videos, maps, charts, and illustrations to gain non-textual, visual information (3.5).

Mathematics content domain is addressed by the students completing catalog order forms and applications for written, symbolic and visual forms of expression (4.2; 4.5; 4.8); grid-scale mapping for spatial sense, geometric properties/relationships & problem-solving (4.1; 4.7); estimating size, area, and placement of plants/bulbs for measurement skills (4.9; 4.10); planning sites for size of plants, depth of planting, and color for patterns representing real-life phenomena (4.11); incorporating growing zone maps and planting specifications for understanding statistics, data, and probability (4.12); measuring and drawing patterns for nesting boxes & feeders for using math tools, numerical representation, and relating math to life (4.3; 4.5; 4.6); planning for relocating and thinning existing plants for developing reasoning ability, self-reliance, and independent thinking skills (4.4).

Science content domain is addressed by the students studying cultural, historical changes in the advancement of science and technology (5.3; 5.4); in-field identification/classification of plants and animals for behavioral interactions (5.7); observing and journaling the interdependence of plants and animals (5.1; 5.6; 5.12); growing seeds under varied circumstances and measuring growth for inquiry, hypothesis, data analyzing/interpretation, and modeling theory (5.2; 5.5); soil testing for structure of matter (5.8); photosynthesis for understanding natural laws and energy transformation (5.9); the solar system, earth, and evolution of humans, animals and plants for origins and structure of the universe, and dynamics and geophysical systems of the earth (5.10 5.11).

Social studies content domain is addressed by the students studying articles on the interaction of world cultures through agriculture, writing and discussing summaries for understanding economic forces, ideas, institutions, and human systems in geography (6.6; 6.8); world maps and color coding geographic, agricultural interdependence for understanding the world in spatial terms (6.7); New Jersey & world economics for understanding societal ideas and forces (6.4); New Jersey and world habitat loss from development for understanding political ideas, forces and institutions (6.3); the Constitution, flow charts, and governmental processes for understanding government systems (6.1); citizenship issues, including political-environmental concerns and philosophies (6.2).

Cross-Content Workplace Readiness Standards are universally addressed. Letter writing campaigns and personal interviews are conducted to research and develop career planning and key employment skills. Technology, via the internet, is used to gain information for the project's development. Critical thinking, decision-making, and problem-solving skills are used as teams prepare for planning and implementing planting and attracting wildlife. Self-management skills are maintained by student foremen and team members when working independently on projects. Safety principles are used in-field while working with tools and machinery, and in class during experiments and labs.

3. Describe the educational needs of students that the practice addresses. Document the assessment and measures used to determine the extent to which the objectives of the practice have been met. Provide assessments and data to show how the practice meets these needs.

The three objectives of the SGHP are assessed through on-site and in-class observation of the students' functional, academic participation. The on-site evaluation is gauged by the coordinating teacher. The teacher observes student performance and assesses it using a 5 point rubric system. The assigned number is recorded on a habsite evaluation form. The in-class evaluation process is two-fold. Written assignments, quizzes and tests are given and graded on a traditional 10 point scale (100-90 A; 89-80; B; 79-70 C; 69-60 D, below 59 F). An in-class behavior form documents participation and compliance by noting a letter grade. Satisfactory/unsatisfactory (S/U) and always/never (A/N) are documented for specific, observed behavior. In all cases IEP goals are met.

Students complete an environmental time sheet, which requires each to fill-in their name, date, task and/or activity, and the amount of time spent working in-field. Assessments for these daily and long-term work efforts include organization, content, presentation, and completion of task in a prearranged time. Time sheets are reviewed by the coordinating teacher at the end of each month, and rewards are given as a "salary" for student accomplishments.

Portfolios are created and maintained throughout the year. These are used for the students' subsequent school-to-work transition. Work samples include: business letterhead, cards, brochures, resumes, time sheets, applications, memos, writing samples, interviewing guidelines, and garden maps. Individual computer disks containing these files are added. At the end of the year portfolios are reviewed and receive a project grade.

Competition, teamwork, collaboration, and respect for others is utilized and encouraged to maintain the 2-fold grading process. These social/emotional behaviors are necessary in creating an effective school-to-work transition. Teams are given a similar assignment, and they compete against each other to complete it. Teams are graded on overall, universal performance using the habsite evaluation rubric and ten point grading system. The winning team is rewarded.

Rewards are awarded at specific intervals. The intervals are dependent upon the length of each activity. Rewards are earned for self-management skills, following directions, cooperation, attitude and behavior, and efficiently completing assigned tasks. An end of year reward includes a visit to a local nursery, and a dinner party for all students who have displayed successful school-to-work transition behavior.

4. Describe how you would replicate the practice in another school and/or district.

The school, coordinating teacher(s), support personnel, and students will be very pleased to share applicable forms, start- and follow-up procedures, and strategies with other interested schools and/or individuals. Procedures, methods, communications, and relationships have been carefully documented and can be easily replicated. A website has been created for others to view.

For replication, the following must be implemented: securing space, gaining administrative and community support, letter writing campaigns, advertising in local newspapers, locating funding, establishing a mentor, creating rubrics, documenting activities, networking with local & national environmental groups and schools, and coordinating outdoor activities with classroom curriculums.

Schoolyard gardens and habitats are an exciting and innovative way to present Core-Curriculum Standards to all students. They can be replicated, varied, and implemented in any rural, suburban, and/or urban school district.